State of Michigan

Michigan Department of AGRICULTURE

Pesticide **Advisory Committee**

Fiscal Year 2003 Annual Report

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PAC Fiscal Year 2003 Annual Report

The Natural Resources and Environmental Protection Act, Act 451 of the Public Acts of 1994, Part 83, Pesticide Control, is administered by the Michigan Department of Agriculture (MDA) through the Pesticide and Plant Pest Management Division (PPPM). The Pesticide Advisory Committee (PAC) was established under Section 8326 of Part 83, to advise and consult with the Director of the MDA in the administration of the Act.

Under the Act, the PAC is required to publish an annual report to the Governor and the Legislature. This report reflects the enforcement actions taken by PPPM during FY 2003 (October 1, 2002 to September 30, 2003).

The 14-member PAC includes five representatives from governmental and university agencies and nine representatives from citizen and industry groups. Representatives from the citizen and industry groups are private citizens chosen for their knowledge and technical expertise in specific areas set forth in Section 8326, Part 83 of Act 451. A current membership list is appended to this report.

Section 8326(4)(e) specifies four major areas to be detailed in this report, including:

1. A review of the recommendations of the PAC.
2. Recommendations regarding amendatory language for the Act.
3. Recommendations regarding resources necessary to adequately implement the Act.
4. A summary of annual enforcement actions taken under the Act.

MEETINGS

The Pesticide Advisory Committee (PAC) meets quarterly, with occasional supplementary meetings called by the Director to address special concerns in a timely manner. The meetings were held in October 2002, and January, April, and July 2003.

COMMITTEE DISCUSSIONS

- MDA provided the PAC with pesticide enforcement activity reports. More detailed information is provided in the next section under, “Enforcement Actions Taken Under Act 451, Part 83, Pesticide Control.” Of particular note to the committee was the appearance of an increase in the number of complaints/investigations concerning unlicensed firms and uncertified applicators. Two reasons were given for the presumed increase. The first factor was collectioning multi-faceted complaint data this fiscal year versus previous years. The other reason is MDA’s continued focus on licensing and certification, and continued increase in public awareness on those requirements.

  MDA also denied the registration of the herbicide Balance. Balance has been used in other states; however, Balance and its metabolites can leach into groundwater and must be applied within narrow concentration limits to avoid phytotoxicity. Therefore, some states have not allowed its use or put severe restrictions in place. An EPA decision on Section 3 registration of Balance is due by late in 2004.

MDA also cancelled the registration of the herbicide Dacthal (a.k.a. DCPA). Dacthal is a herbicide principally used for strawberries and turf applications. MDA took this action when it was found that the metabolites of Dacthal were found in private drinking wells in several communities around the state. The order in part states, "…substantial scientific evidence exists that the pesticide DCPA is likely to cause an unreasonable adverse effect on the environment including contamination of groundwater at sites throughout the State of Michigan."

After an EPA audit of the Worker Protection Standard (WPS) inspections for the last five years, MDA made several enhancements to the inspection process. These enhancements include electronic WPS inspection forms, incorporating a WPS review in all FY 2003 agricultural inspections, and more complete follow-up procedures.

The PAC also discussed two bills specifically dealing with pesticide applications. HB 6427 dealt with requiring posting prior to applying pesticides. HB 5958 dealt with permitting of aquatic pesticide applications by the Michigan Department of Environmental Quality (DEQ) and enforcement of violations by MDA.

- The MSU Pesticide Safety and Education Program works with the MDA Pesticide Section to carry out applicator certification and training. Under a Memorandum of Understanding, the program conducts training and education in at least eight major areas. Each quarter, the Pesticide Education Program reports its activities to the PAC.

  The Pesticide Education Program develops and revises applicator-training manuals of which several were completed in FY 2003, including Category 1C, Fruit Crop Pest Management and the Spanish version of the Michigan Core Manual. The Michigan Core Manual was reprinted as well as the Category 3B manual, Ornamental Pest Control.

  The Pesticide Education Program creates other pesticide-related materials, such as slide sets for pesticide training and farm security and brochures such as one entitled, "Community Spray Programs."

  The Pesticide Education Program has also been instrumental in hosting several educational in-service opportunities, namely the Michigan State University Extension fall in-service for extension agents and the Michigan Agricultural Aviation Conference and Operation Safe.

- The MDA staff updated the committee regarding its role in the state's West Nile Virus (WNV) outbreak. The MDA has the responsibility of registering pesticides for adulticiding and larviciding, enforcing rules and regulations regarding community spray programs, conducting planned use inspections of all licensed commercial mosquito spraying firms, providing arboviral surveillance updates, maintaining the pesticide notification registries, overseeing the reporting network between MDA and veterinarians on possible animal cases of WNV, collecting animal samples for WNV screening, administering the Michigan Arboviral Surveillance Emergency Response Plan, and assisting local health departments with the development of mosquito surveillance and contingency plans.

  The PAC received continual updates regarding the spread of WNV for 2002/2003. In October 2002, the committee reviewed the distribution of confirmed human cases, confirmed horse cases, and avian positive counties. At that time, there had been 318 equine (horse) cases with approximately a 50% death rate in the infected horses. Michigan

has had 445 confirmed human cases of WNV with 31 deaths. Seventy-two counties have had positive WNV birds. In 2002, the Center for Disease Control (CDC) listed Michigan as leading the nation for WNV deaths and second in the nation for confirmed human cases. Another mosquito borne encephalopathy, Eastern Equine Encephalitis (EEE), had been confirmed from birds in Kalamazoo. A 62-year old male recovered from EEE.

The Michigan Mosquito Association and MDA have rewritten the Mosquito Manual. The new manual contains valuable information about WNV. The manual is on the Michigan Mosquito Association's website at: http://www.mimosg.org

For 2003, a WNV website was established to disseminate information on health, environmental and abatement related activities. This comprehensive website includes information for the public such as health effects of WNV, DEET, and reporting dead/dying birds. All the presentations from the West Nile Virus Conference, held April 23, 2003, will be on the website. The information will be updated nightly (bird reports).

Applications of larvicides made to the surface waters of the state may be subject to DEQ certification. Applications for larviciding are available at this website or by calling the DEQ. The internet address is: michigan.gov/westnilevirus.

On October 2, 2002, the "Mosquito Abatement for Safety and Health Act" authorized 100 million dollars for fiscal year 2003 to help local communities threatened by WNV human cases to develop and operate local/community mosquito control programs. It should be noted that even though this legislation authorized 100 million dollars for assistance, no money has yet been allocated for the assistance.

Michigan has an Emergency Arbovirus Response Plan. This plan was activated in mid-September. The plan describes specific actions to be taken at five different levels of risk (positives). This action plan is based on CDC recommendations.

Health department field staff is conducting a new procedure to detect the virus in dead birds. The new test involves opening the beak and taking a swab for later WNV testing. There are concerns with this method of testing because some lab workers have been known to become infected from handling the dead birds by breathing in the virus.

- MDA produced an overview of the department's overall bioterrorism and security efforts. The overview includes MDA's programs for ensuring food safety, animal and plant health, and consumer protection. The review included a description of the surveillance, inspection, registration, certification, licensing, and education standards and/or requirements in place that help protect the state's food supply, livestock, and environment.

  The department is an active partner in Michigan's emergency management system and regularly participates in preparedness and response drills. MDA's specific responsibilities include: 1) respond to threats of food safety and to provide federal surplus food during times of food shortages; 2) provide for the care of animals affected by disasters; 3) respond to animal disease epidemics; 4) respond to agricultural chemical and fertilizer emergencies; 5) monitor, inspect and sample food and animal feed resources; 6) issue regulatory controls, protective orders and advisories to help keep Michigan's food, animal feed, plants and animals safe; 7) provide technical guidance and assistance, including damage assessments, to local units of government; 8) help provide federal assistance to farmers and agribusinesses that are victims of disasters, and 9) cooperate with other states,

governmental, educational, and business enterprises to protect Michigan's food, feed, plant and animal health.

- MDA and MSU have conducted a pesticide exposure study during the past two summers. This study is investigating the potential and real exposure to pesticides in seed corn production. This crop has significant hand labor activities where exposure to fungicides and insecticides can occur. Volunteer MDA and Michigan Crop Improvement Association inspectors, scouts, roguers and detasselers kept records of time actually spent in the field. Initial reports indicate that much less actual time is spent in the field after pesticide application than the EPA assumes in their risk assessments. Analysis also revealed that people are potentially exposed to less than half as many pesticides as EPA uses as assumptions in risk assessment. Pesticide residues were detected on 2% of the protective clothing, face and neck wipes, and hand wash samples, all at very low levels. The study is continuing to gather additional data from all groups of people so a complete picture of exposure can be given to EPA for risk assessment. Information will be provided to the companies for safety training purposes.

- The MSU Coordinator for the IPM (Integrated Pest Management) Program presented MSU's vision for IPM and ICM (Integrated Crop Management). The core components to IPM and ICM are efficient and effective identification and monitoring tools. The program also relies on biocontrol, plant resistance, cultural controls, pesticides (reduced-risk pesticides as appropriate) and sustainable IPM whenever possible. The MSU IPM program focuses on five areas: greenhouse, landscape and nursery, field crops, fruit crops, and vegetable crops. This program has federal (EPA and USDA), and state (MDA and DEQ) partners. Funding has been obtained from GREEEN, industry, federal, and other granting agencies.

  Challenges to the program include funding, changing pest management/land management environment and concepts of IPM. Success of the program depends on bridging knowledge to go from old to new pest management techniques and technologies.

- MDA announced to the PAC that the Gypsy Moth Suppression Program experienced an increase of gypsy moth population during the past year. Gypsy Moth spraying was conducted in five counties in 2003, Roscommon, Montmorency, Otsego, Grand Traverse, and Leelanau. BT will be the only product sprayed by aerial application.

- Michigan Community Health Department (MCHD) presented the results of the Michigan Occupational Pesticide Illness and Injury Surveillance System funded by a grant from the CDC. This database has been operational since 1999. Information was presented from 1999 through 2002. The sources for the data are poison control centers, occupational disease reports, MDA complaint database, and death data (work or farm related).

  MDCH will also institute a program to capture adverse health effects related to the use of pesticides for mosquito abatement to decrease the incidence of West Nile Virus (WNV) infections in the state. A draft of MDCH's procedures for recording complaints related to adverse health effects from WNV spraying was distributed to the PAC with a copy of the WNV human exposure and illness report.

- The PAC also received notice that Emerald Ash Borer (EAB) *Agrilus planipennis* Fairmaire (Coleoptera: Buprestidae), an exotic beetle which feeds on ash trees (*Fraxinus sp*.), was discovered in southeastern Michigan. This pest was identified in July 2002 as the cause for

the decline in ash tree populations. The larvae feed in the phloem and outer sapwood, producing galleries that eventually girdle and kill branches and entire trees. Evidence suggests that *A*. *Planipennis* has been established in Michigan for at least five years in six southeastern counties: Wayne, Oakland, Macomb, Monroe, Washtenaw, and Livingston. In response, MDA officials quarantined all ash trees and timber products in the affected counties to help prevent and control the spread of this pest. Under this quarantine, ash trees, branches, logs, and firewood may not be moved outside the affected area unless certified for movement by the MDA. In August, 2003, MDA added seven additional Southeast Michigan counties (St. Clair, Lapeer, Genesee, Ingham, Jackson, Shiawassee and Lenawee) to the quarantine area.

In May 2003, MDA received approximately $6.8 million to eradicate EAB from Michigan. The department's efforts have been focused on the following: 1) creating the initial infrastructure, 2) conducting surveys to determine the extent of the infestation, 3) enforcing quarantine provisions, 4) providing sanitation and disposal options, 5) initiating research into pest biology and control strategies, and 6) ensuring public outreach and education.

Regulatory efforts have been focused on restricting the movement of ash by firewood dealers, tree companies, land clearing companies, nursery dealers, municipalities, landscapers, and wood product manufacturers.

Various governmental and jurisdictional bodies have met to form an interagency EAB Task Force to make recommendations for suppression activities against the borer via development of a management plan/strategy.

- The PAC was informed of various personnel and budgetary issues throughout the year. The first issue addressed pertained to the "early out" program. Department-wide there are 76 employees retiring from MDA of which only 19 can be replaced. PPPM had 15 employees retire; five will be replaced.

  Due to budget deficits within state government, MDA made several cost cutting measures. One decision was to discontinue the seed program within MDA. This program was entirely funded by general fund money.

  The last issue was the tracking of the ground water fees from pesticide registrations. The formula for the ground water fee for non-specialty products is ¾ of 1% or a minimum fee of $150. The ground water fees are used to improve the environment and are disbursed back to the public through grants for environmental projects and "assist" programs. The Environmental Stewardship Division administers the assist programs that include: Farm*A*Syst, Farm Risk Assistance, MAEAP, Abandoned Wells, Farmstead Improvement Action Plan, Home*A*Syst, Orchard*A*Syst, Field*A*Syst, and Greenhouse*A*Syst.

ENFORCEMENT ACTIONS TAKEN UNDER ACT 451, PART 83, PESTICIDE CONTROL

In FY 2003, the pesticide program's enforcement activities continued to address significant issues of pesticide misuse, uncertified or unregistered applicators, unlicensed commercial pesticide applicator firms, and non-compliance with state statutory requirements. The enforcement program oversees inspection and investigation activities for the pesticide section. These activities include:

- Conducting pesticide use/misuse investigations
- Inspecting pesticide producing establishments and pesticide marketplace locations
- Auditing of restricted use pesticide (RUP) dealer sales and commercial applicator records
- Addressing pesticide use violations related to food safety and farm worker protection
- Implementing federal and state targeted compliance monitoring initiatives

Other enforcement activities include marketplace surveillance for unregistered pesticides and proper pesticide labeling, contacts with applicators and RUP dealers to assure compliance with certification and licensing requirements, and special projects like the federal Urban Initiative.

In FY 2003, enforcement activities continued to address significant issues of pesticide misuse in the urban environment, including use of agricultural pesticides to control urban pests, uncertified or unlicensed commercial pesticide applicators, and compliance with federal and state pesticide use regulations.

Use Investigations

MDA conducted 132 pesticide use investigations (UIs), of which 42 occurred in agricultural situations and 90 occurred in non-agricultural situations. Of the agricultural use investigations, 21 involved commercial applicator firms, 8 of which were aerial application firms and 2 restricted use pesticide dealers. Twenty investigations involved private applicators, (5 of which were unknown applicators and 6 were not certified).

Of the 90 Non-Ag UIs, 5 involved homeowners and 85 involved commercial applicators in the following categories:

Category of the Commercial Applications	Number of FY'03 Use Investigations	% of Total
Homeowner	5	6%
Turf Grass (3A)	40	44%
Ornamentals (3B)	15	17%
Antimicrobial (5B)	1	1%
Right of Way (6)	4	4%
General Pest Management (7A)	16	18%
Wood Destroying Organisms (7B)	3	3%
Vertebrate Pest Management (7D)	1	1%
Mosquito (7F)	2	2%
Total	**90**	**--**

The number of complaints filed with MDA in FY 2003 continued a downward trend with a 22% reduction from the 169 complaints investigated in FY 2002**.** Complaints were filed for numerous reasons as shown in the following table:

Primary allegation of Complaint	Count
Not licensed	38
Misuse	28
Drift	26
Notification	13
Not certified/registered	9
Miscellaneous: IPM, Misbranded product, PPE (2), Recordkeeping, RUP-related, Spill kit, WPS, and Other	9
Customer information/consent/posting	5
Exposure	4
Total	**130**

UI Enforcement

MDA closed 77 of the 132 total FY 2003 UIs during FY 2003, noting that a disproportionate number of the complaints (47%) were received after June 1, 2003. An "aging report" of open cases was implemented during the 4th quarter of FY 2003 as a tracking tool to assist the regions in meeting the division's Continuous Quality Improvement goal of closing cases within 90 days.

FY 2003 Use Investigation Enforcement Actions

Enforcement Action	Count
None required	6
Disposition Letter	3
Advisory Letter	11
Warning Letter	39
Informal Hearing	2
Notice of Intent	16
Not yet closed	55
TOTAL	**132**

During FY 2003, MDA also closed 77 cases from FY 2002 and 27 cases from FY 2001. The following table provides a general idea of the public sector that contacted MDA in FY 2003 with complaints concerning pesticides.

FY 2003 Use Investigation Complainant Sources

Complainant Source	Number of Complaints
Private Citizens	80
MDA, PPPM Division	33
Anonymous	10
Businesses	6
Other Government Agencies	3

During FY 2003, MDA regional offices closed cases with disposition or advisory letter on investigations where no violations either occurred or could be confirmed. Investigations that resulted in the determination of a low-level violation continued to result in a warning letter being issued from the regional office under signature of the regional supervisor. The majority of these letters required a 20-day written response to MDA from the firm/individual involved. Any

enforcement action more severe than a warning letter continues to be coordinated through the MDA Lansing office and the Pesticide Enforcement Manager.

MDA continued to issue Notices of Intent (NOIs) that outline MDA's intent to initiate administrative proceedings or criminal prosecution actions. The NOI provides MDA an opportunity for a settlement in the form of a consent agreement and final order as well as a civil penalty. Since the initiation of the process in June 1997, over 375 UI cases have been settled through this process.

Planned Use Inspections

MDA conducted 75 Planned Use Inspections (PUIs) in FY 2003, representing a 107% achievement of the FY 2003 MDA/EPA grant commitment. Of these, 26 were at agricultural sites; 22 of which involved private applicators, and 4 of which were with commercial firms. MDA conducted 49 PUIs at non-agricultural sites, 32 of which were conducted at commercial pesticide application firms.

Pesticide Contacts

Through the pesticide contacts (PCT) tracking system, a total of 1,261 contacts were conducted in FY 2003. These include targeted inspections of specific pesticide use activities, road check inspections, informational contacts, compliance assistance and outreach, and monitoring for compliance with state regulatory requirements. Some contacts contain specific orders to stop prohibited conduct such as failure to renew the firm's commercial pesticide applicator license.

FY 2003 Pesticide Contacts

Contact	Number of Contacts
Stop Orders to Firms Failing to Renew	472
Regional Letters on Licensing	466
Road Check	131
Pesticide Use Concerns	91
Total IPM Contacts	67
WPS Follow-up	22
Other	12

During the outdoor application season, MDA conducted 131 road check inspections. Most of these inspections involve the observation of a pesticide application. At a minimum, MDA inspects the application equipment along with conducting a comprehensive interview with the applicator. The focus of the inspection is to identify the areas of Act 451 and Regulations 636 and 637 in which the firm is or is not in compliance. A summary report of the violations found during FY 2003 is being prepared.

Inspections target pesticide label use directions for the products being used, licensing, certification, customer service agreements, application information and personal protective equipment. Most road checks are conducted with firms working in the turf and ornamental industry.

MDA regions issued 466 contacts to commercial firms regarding licensing issues (notification of requirements, response to inquiry, or follow-up on non-renewal). MDA made 42 contacts with various individuals regarding pesticide use concerns. MDA conducted 67 contacts with IPM regulated facilities, primarily with schools regarding IPM and parental notification requirements. MDA issued 472 Stop Orders from the Lansing Office to pesticide application businesses that had yet to renew their license for 2003 in a timely manner. From the FY 2003 contacts, MDA

issued 614 Stop Prohibited Conduct Orders, 35 warning letters, 18 advisory letters, and 13 Notices of Intent.

Producer Establishment Inspections

During FY 2003, MDA conducted 50 Pesticide Producer Establishment Inspections (PEIs), the majority of which have already been referred to EPA for enforcement action or review. These inspections represent an accomplishment of 100% of the commitment in this program area for FY 2003. Twenty-one inspections were conducted at bulk repackagers. Sixteen inspections specifically included WPS product label reviews for a total of 70 pesticide product label reviews. Eighteen inspections specifically targeted antimicrobial pesticides with a total of 38 different documentary samples collected for label reviews and 9 formulation samples collected for analysis (as part of the national EPA antimicrobial initiative).

Federal Marketplace Inspections

During FY 2003, MDA conducted 21 federal Marketplace Inspections (MPIs), the majority of which have been referred to EPA for enforcement action or review. These inspections represent a 105% accomplishment of the commitment in this program area for FY 2003. Ten inspections resulted in physical samples being collected.

Pesticide Applicator Business Licensing

As of October 10, 2003, 1,755 companies were licensed as commercial pesticide application businesses for the 2003 calendar year. Almost 200 applications for new licenses were received from the period of October 1, 2002 through October 22, 2003. Of special note was an increase in the number of new and existing firms licensed in mosquito management (Category 7F). In FY 2003, 121 firms were licensed to make Category 7F applications, a 19% increase over the 98 firms similarly licensed in FY 2002. Many of the firms adding the category to an existing license indicated that they had received requests from their existing customer base to add this service.

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January 17, 2003

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